

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the subject application.

Listing of Claims:

1. (Currently Amended) A transaction system for performing secure transactions over a communication network comprising:

a merchant server system including a computer processor and associated memory, said merchant server system offering items for sale;

a buyer system including a computer processor and associated memory, said buyer system being selectively ~~couplable~~ coupled to said merchant server system over said communication network to initiate a transaction, wherein, during said transaction, said buyer system selects one or more of said items for purchase;

a security server system distinct from said merchant server system and including a computer processor and associated memory and an encryption device, said security server system receiving buyer information from said buyer system, encrypting said buyer information in an encryption key that prevents said merchant server system from decrypting said buyer information, and transferring said encrypted buyer information to said merchant server system, ~~said buyer information being otherwise not provided to said merchant server;~~ and

a ~~third~~ payment processor server system including a computer processor and associated memory, said ~~third~~ payment processor server system being selectively ~~couplable~~ coupled to said merchant server system, wherein said merchant server system transmits at least a payment portion of said encrypted buyer information to said ~~third~~ payment processor server system for processing during said transaction-;

wherein said merchant server system cannot decrypt said encrypted payment information and said payment processor server system can decrypt said encrypted payment information; and

wherein said payment processor server is responsive to said encrypted payment information to decrypt said encrypted payment information and using said decrypted payment information, to determine if said transaction is authorized or not, and to communicate said

determination to said merchant server system.

2. (Canceled)

3. (Currently Amended) The transaction system of claim 2 5 wherein said encrypted buyer information received by said delivery server system is delivery address information of said buyer.

4. (Canceled)

5. (Currently Amended) The transaction system of claim 1 further comprising a ~~fourth~~ delivery server system including a computer processor and associated memory, said ~~fourth~~ delivery server system being selectively ~~couplable~~ coupled to one of said merchant server system and said ~~third~~ payment processor server system, wherein said one of said merchant server system and said ~~third~~ payment processor server system transmits at least a delivery information portion of said encrypted buyer information to said ~~fourth~~ delivery server system for processing during said transaction;

wherein said delivery server system is responsive to said encrypted delivery information to decrypt said encrypted delivery information to determine a delivery address for delivery of said one or more selected items.

6. (Currently Amended) The transaction system of claim 5 wherein said security server system encrypts said buyer information into a first document and a second document, wherein said first document is transmitted to said ~~third~~ payment processor server system by said merchant server system and said second document is transmitted to said ~~fourth~~ delivery server system by said merchant server system.

7. (Currently Amended) The transaction system of claim 5 wherein said security server system encrypts said buyer information into a first document and a second document, wherein said first and second documents are transmitted to said ~~third~~ payment processor server system by

said merchant server system and said second document is transmitted to said ~~fourth~~ delivery server system by said ~~third~~ payment processor server system.

8. (Currently Amended) The transaction system of claim 6 ~~wherein said third server system is one of a delivery server system and a payment processor server system and wherein said fourth server system is the other of said delivery server system and said payment processor server system, and~~ wherein said first document contains one of the buyer system's delivery address information and the buyer system's payment information and the second document contains the other of said buyer system's delivery address information and said buyer system's payment information.

9. (Currently Amended) The transaction system of claim 8 wherein said security server system encrypts said first document using a first encryption key and said second document using a second encryption key, wherein said one of said ~~third~~ payment processor server system and said ~~fourth~~ delivery server system that receives said first document can decrypt said first document but not said second document and wherein said other one of said ~~third~~ payment processor server system and said ~~fourth~~ delivery server system that receives said second document can decrypt said second document but not said first document.

10. (Currently Amended) The transaction system of claim 7 ~~wherein said third server system is one of a delivery server system and a payment processor server system and wherein said fourth server system is the other of said delivery server system and said payment processor server system, and~~ wherein said first document contains one of the buyer system's delivery address information and the buyer system's payment information and the second document contains the other of said buyer system's delivery address information and said buyer system's payment information.

11. (Currently Amended) The transaction system of claim 10 wherein said security server system encrypts said first document using a first encryption key and said second document using

a second encryption key, wherein said one of said ~~third~~ payment processor server system and said ~~fourth~~ delivery server system that receives said first document and second documents from said merchant server system can decrypt said first document but not said second document and wherein said other one of said ~~third~~ payment processor server system and said ~~fourth~~ delivery server system that receives said second document can decrypt said second document but not said first document.

12. (Currently Amended) A system for performing secure transactions over a communication network comprising:

- a merchant server system including a computer processor and associated memory, said merchant server system offering items for sale;

- a buyer system including a computer processor and associated memory, said buyer system being selectively ~~couplable~~ coupled to said merchant server system over said communication network to initiate a transaction, wherein, during said transaction, said buyer system selects one or more of said items for purchase;

- a security server system distinct from said merchant server system and including a computer processor and associated memory, said security server system being selectively ~~couplable~~ coupled to said buyer system to receive buyer information from said buyer system in the course of said transaction, said buyer information including delivery address information and payment information;

- a delivery server system including a computer processor and associated memory; and

- a payment processor server system including a computer processor and associated memory;

- wherein said security server encrypts and transmits said delivery address information to said delivery server system and said payment information to said payment processor server system by way of said merchant server system, said delivery address information and said payment information of said buyer information being not otherwise provided to said merchant server system;

- wherein said delivery server system is responsive to said encrypted delivery address

information to decrypt said encrypted delivery address information to determine a delivery address for delivery of said one or more selected items.

13. (Original) The transaction system of claim 12 wherein said security server system encrypts said delivery address information into a first document and encrypts said payment information into a second document.

14. (Currently Amended) The transaction system of claim 13 wherein said security server system transmits said first and second documents to said merchant server system, which transmits said first document to said delivery server system and said second document to said payment processor server system; and

wherein said merchant server system ~~is incapable of decrypting~~ cannot decrypt said first and second documents.

15-25. (Canceled)

26. (Currently Amended) A system for performing secure transactions over a communication network comprising:

a merchant server system including a computer processor and associated memory, said merchant server system offering items for sale;

a buyer system including a computer processor and associated memory, said buyer system being selectively couplable to said merchant server system over said communication network to initiate a transaction, wherein, during said transaction, said buyer system selects one or more of said items for purchase;

a delivery server system including a computer processor and associated memory;

a payment processor server system including a computer processor and associated memory; and

a security server system distinct from said merchant server system and including a computer processor and associated memory and an encryption device, said security server system

receiving buyer information from said buyer system and forming a merchant document associated with said merchant server system and including information regarding the item being purchased ~~and not including the buyer's payment information and the buyer's shipping address,~~ encrypting said buyer information into a payment document associated with said payment server system and including the buyer's payment information and encrypting said buyer information into an address document associated with said delivery server system and including the buyer's shipping address;

said security server system transferring said buyer information to a first one of said merchant server system, a said payment server system and a said delivery server system, wherein said first system removes the document associated with the first system and transmits the remaining documents to a second one of said merchant server system, said payment server system and said delivery server system, wherein said second system removes the document associated with the second system and transmits the remaining document to a third one of said merchant server system, said payment server system and said delivery server system;

wherein said security server system encrypts said buyer information using an encryption key in which only said payment server system ~~is capable of decrypting~~ can decrypt said payment document and only said delivery server system ~~is capable of decrypting~~ can decrypt said address document[.]; and

wherein said payment server system is responsive to said encrypted payment information to decrypt said encrypted payment information and using said decrypted payment information, to determine if said transaction is authorized or not, and to communicate said determination to said merchant server system

wherein said delivery server system is responsive to said encrypted delivery information to decrypt said encrypted delivery information to determine a delivery address for delivery of said one or more selected items.

27. (Currently Amended) A method for performing secure transactions over a communication network comprising:

A. establishing a connection between a buyer system and a merchant server system over

said communications network to initiate a purchase transaction;

B. said buyer system selecting an item offered for sale by said merchant server system;

C. said buyer system transmitting buyer information to a security server system distinct from said buyer system;

D. said security server system encrypting said buyer information using an encryption key that prevents said merchant server system from decrypting said encrypted buyer information;

E. said security server system transmitting said encrypted buyer information to said merchant server system;

F. said merchant server system transmitting at least a payment information portion of said encrypted buyer information to a ~~third~~ payment processor server system for processing during said purchase transaction; and

G. said ~~third~~ payment processor server system decrypting said at least a portion of said encrypted buyer information before processing said information, and then using said decrypted payment information to determine if said transaction is authorized or not, and communicating said determination to said merchant server system.

28. (Withdrawn) A method for identifying a party comprising:

A. obtaining a plurality of identifying indicia from each of a plurality of parties;

B. performing a one-way hash function on each of said plurality of identifying indicia to form a plurality of hashed identifiers, wherein a particular output of said one-way hash function is unique to a particular input of said hash function;

C. forming an array of hashed identifiers for each of said plurality of parties, wherein each array includes a number of hashed identifiers that are unique to each party;

D. receiving an identifying indicium from a party;

E. performing said hash function on said indicium to form a hashed indicium;

F. parsing each of said arrays to determine if said hashed indicium coincides with a hashed identifier therein;

G. determining which, if any, of said arrays contains a match between said hashed indicium and a hashed identifier;

wherein, upon one match occurring, the method identifies a unique party from said plurality of parties based said match between said hashed indicium and said hashed identifier;

wherein, upon two or more matches occurring, the method repeats steps D-G until one of said arrays contains a set of matches that none of the other arrays contain; and

H. identifying a unique party from said plurality of parties based on said set of matches.

29. (Withdrawn) A method for identifying a party comprising:

in a security server system including a computer processor and associated memory, said security server system being selectively couplable to a second server system, including a computer processor and associated memory, over a communications network, performing the steps of:

A. obtaining a plurality of identifying indicia from each of a plurality of parties;

B. performing a one-way hash function on each of said plurality of identifying indicia to form a plurality of hashed identifiers, wherein a particular output of said one-way hash function is unique to a particular input of said hash function;

C. forming an array of hashed identifiers for each of said plurality of parties, wherein each array includes a number of hashed identifiers that are unique to each party; and

in said second server system, performing the steps of:

D. receiving an identifying indicium from a party;

E. performing said hash function on said indicium to form a hashed indicium;

F. parsing each of said arrays to determine if said hashed indicium matches with a hashed identifier therein;

G. determining which, if any, of said arrays contains a match between said hashed indicium and a hashed identifier;

wherein, upon one match occurring, the method identifies a unique party from said plurality of parties based said match between said hashed indicium and said hashed identifier;

wherein, upon two or more matches occurring, the method-repeats steps D-G until one of said arrays contains a set of matches that none of the other arrays contain; and

J. identifying a unique party from said plurality of parties based on said set of matches.

REMARKS

Claims 2, 4 and 15-25 have been canceled. Claims 1 and 3, 5-14, 26 and 27 remain in the application. Claims 1 and 26 have been amended in the manner suggested by the examiner at the interview dated December 13, 2006, removing the limitation added by the previous amendment. Claims 1 and 27 have been amended to clarify the references to the “third server system” and the “fourth server system,” replacing “third” with “payment processor” and “fourth” with “delivery.” A payment processor server system 140 and a delivery server system 160 are disclosed in the specification in paragraph 56, among other places. No new matter is added. The dependant claims have been amended to be consistent with amendment claims 1 and 27. Claims 1, 12 and 26 have been amended to define the payment processor server system as disclosed in FIG. 4. Claim 5 has been amended to define the delivery server system as disclosed in FIG. 4. No new matter is added. For the reasons set forth below, the amendments are believed to place the application in condition for allowance.

In paragraphs 3 and 4 of the Action, claims 1, 12, 15 and 26 were rejected under 35 USC §112, second paragraph, as being indefinite. In support of the rejection of claims 1, 12, 15 and 26, the examiner cited the limitation “the buyer information otherwise not being provided to the merchant server,” stating that it was not clear as to what is being provided to the merchant server since applicant disclosed above that encrypted buyer information is transferred to the merchant server. As discussed at the interview dated December 13, 2006, that limitation was not necessary in view of the encryption of buyer information and its transfer, as encrypted, to the merchant server, as defined earlier in the respective claims. Accordingly, as suggested by the examiner, that limitation is removed by the above amendments.

At the December 13th interview, the examiner also objected to the use of the term “third” as a modifier to the “third server,” and although not discussed at the interview, would object to the use of the term “fourth” as a modifier to the “fourth server,” throughout the claims. As noted above, claims 1 27 have now been modified to define “the third server system to be a payment processor server system” and “the fourth server system to be a delivery server system.” Those amendments resolve the “third server system” and “fourth server system” objections of the examiner.

In view of the amendments, there now is no proper basis for the §112 rejections and the examiner's objections. Those rejections and objections should be reconsidered and withdrawn.

In paragraphs 6 and 7 of the Action, all claims 1-27 were rejected under 35 USC §102(e) as being clearly anticipated by U.S. Patent Publication No. 2004/0260953 (Tsuei). Issue is taken with that position.

In support of the rejection of applicants' independent claims 1 and 15, the examiner concludes that Tsuei discloses each and every element of those claims in paragraphs 0013-0030 and 0074-0091, without citing any specific portions of those paragraphs. The examiner similarly supports his rejection of applicants' independent claim 12, by citing paragraphs 0013-0030 and 0074-0091 again, and additionally, paragraphs 0029 and 0022 of Tsuei. The examiner similarly supported his rejection of applicants' independent claim 26, by again citing paragraphs 0013-0030 and 0074-0091, and additionally paragraph 0029 of Tsuei. The examiner supported his rejection of applicants' claim 27 based on Mital (presumably, referring to Tsuei), again citing paragraphs 0013-0030 and 0074-0091. The stated bases for all of the rejections were merely instructions to "see" the identified paragraphs of Tsuei, with no specificity of any particular portions of the 30⁺ paragraphs.

However, while Tsuei does relate to anonymous transactions, as do applicants' claims, none of the rejections have a proper basis for the §102 rejection. Applicants' independent claims 1, 12, 26 and 27 define a distinctly different architecture and method from that taught or suggested by Tsuei. There is no teaching of certain elements of applicants' claims 1, 12, 26 and 27 in Tsuei, and thus, there is no proper basis for the §102 rejection.

More particularly, Tsuei defines a hub-and-spoke architecture where a plurality of service providers, or information requestors, are each directly coupled to a central system server, as shown in FIG. 1 of Tsuei. Each of the service providers of Tsuei communicates with the system server over direct communication links; see paragraph 0067 of Tsuei. There is no teaching or suggestion in Tsuei of any communication links between service providers. Tsuei describes the communication between a service provider and the system server at paragraph 0068 in conjunction with FIG. 2, which incorporates the alias method and system 20 of Tsuei. Tsuei goes on to describe that anonymous transaction method and system in succeeding